AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Previously Presented) The method of claim 42, wherein the first transaction at the first time and the first transaction at the second time are performed at a first communication speed or in accordance with a first protocol.

3. (Previously Presented) The method of claim 42, wherein the second transaction is performed at a second communication speed or in accordance with a second protocol.

4. (Previously Presented) The method of claim 42, further comprising performing a third transaction between the first transaction at the first time and the first transaction at the second time.

5. (Previously Presented) The method of claim 42, wherein performing the first transaction at the first time includes,

sending from the host controller to the hub a first token packet including agent identification information and a transfer indicator indicating that data needs to be transferred between the host controller and the hub, and

transferring a data packet between the host controller and the hub.

6. (Original) The method of claim 5, wherein performing the first transaction at the first time includes the processing by the host controller at least one of an acknowledgment, a handshake indication, or a timeout indication.

7. (Original) The method of claim 5, wherein transferring the data packet between the host controller and the hub includes sending the data packet from the host controller to the hub.

8. (Previously Presented) The method of claim 42, wherein performing the first transaction at the second time includes,

sending from the host controller to the hub a first token packet including agent identification information and a transfer indicator indicating that data needs to be transferred between the host controller and the hub, and

transferring a data packet between the host controller and the hub.

9. (Original) The method of claim 8, wherein performing the first transaction at the second time includes processing by the host controller at least one of an acknowledgment, a handshake indication, or a timeout indication.

10. (Original) The method of claim 8, wherein transferring the data packet between the host controller and the hub includes sending the data packet from the hub to the host controller.

11. (Previously Presented) A method for communicating data between a host and an agent, the method comprising: receiving at a host controller from an agent a request to perform transactions periodically with a first period;

generating a frame template including a first transaction to be performed between the host controller and a hub;

performing periodically the first transaction of the frame template with a second period that is less than or equal to half of the first period; and

storing a transaction result in a memory.

12. (Original) The method of claim 11 wherein the template period is greater than a duration of one frame.

13. (Original) The method of claim 11, wherein the template period is less than a duration of one frame.

14. (Original) The method of claim 11, further comprising performing periodically with the first period a second transaction between the hub and the agent.

15. (Original) The method of claim 14, wherein the periodically performed second transaction transfers information between the agent and the hub, and the periodically performed first transaction transfers the information between the host controller and the hub.

16. (Previously Presented) A method for communicating data between a host and an agent, the method comprising:

receiving at a host controller from an agent a request to perform transactions periodically with a first period;

generating a first frame template and a second frame template each including a first transaction to be performed between the host controller and a hub;

performing periodically with the first period the first transaction from the first frame template;

performing periodically with the first period the first transaction from the second frame template such that the first transaction from the first template and the first transaction from the second frame template are displaced in time by an interval; and

storing a transaction result in a memory.

17. (Original) The method of claim 16, wherein the first period is greater than or equal to a duration of one frame.

18. (Original) The method of claim 16, wherein the interval is less than a duration of one frame.

19. (Original) The method of claim 16, wherein the interval is greater than a duration of one frame.

20. (Original) The method of claim 16, further comprising:

performing periodically with the first period a second transaction between the hub and an agent;

wherein the periodically performed second transaction transfers data from the agent to the hub; and

wherein the periodically performed first transaction from the second template transfers the data from the hub to the host controller.

21. (Original) The method of claim 16, wherein the periodically performed first transaction from the first template transfers data from the host controller to the hub, further comprising:

performing periodically with the first period a second transaction between the hub and an agent; and

wherein the periodically performed second transaction transfers the data from the hub to the agent.

22. (Cancelled)

23. (Previously Presented) The system of claim 43, wherein the first transaction at the first time and the first transaction at the second time is performed at a first communication speed or in accordance with a first protocol.

24. (Previously Presented) The system of claim 43, wherein the second transaction is performed at a second communication speed or in accordance with a second protocol.

25. (Previously Presented) The system of claim 43, wherein the host controller is to perform a third transaction between the first transaction at the first time and the first transaction at the second time.

26-32. (Cancelled).

33. (Previously Presented) The system of claim 44, wherein the first transaction at the first time and the first transaction at the second time is performed at a first communication speed or in accordance with a first protocol.

34. (Previously Presented) The system of claim 44, wherein the second transaction is performed at a second communication speed or in accordance with a second protocol.

35. (Previously Presented) The system of claim 44, wherein the first hub controller is further to perform a third transaction between the first transaction at the first time and the first transaction at the second time.

36-41. (Cancelled).

42. (Previously Presented) A method for communicating data between a host and an agent, the method comprising:

performing a first transaction at a first time between a host controller and a hub, said first transaction initiated by said host controller;

performing a second transaction between the hub and an agent based on the first transaction at the first time;

repeating, by the host controller, the first transaction at a second time between the host controller and the hub; and

storing a transaction result in a memory.

43. (Previously Presented) A digital system comprising:

a host controller;

a device driver to operate the host controller to initiate and perform a first transaction at a first time between the host controller and a hub and to initiate and repeat the first transaction at a second time between the host controller and the hub;

wherein the hub is to perform a second transaction with an agent based upon the first transaction at the first time; and

wherein the first transaction at the second time is repeated after the second transaction.

44. (Previously Presented) A digital system comprising:

a first hub controller to initiate and perform a first transaction at a first time with a

host controller and to initiate and perform the first transaction at a second time with the host controller;

a second hub controller coupled to the first hub controller to perform a second transaction with an agent based upon the first transaction at the first time; and

wherein the first transaction at the second time is performed after the second transaction.

45. (Previously Presented) A digital system comprising:

a host controller;

a device driver to operate the host controller to initiate and perform a first transaction at a first time between the host controller and a hub and to initiate and repeat the first transaction at a second time between the host controller and the hub;

wherein the hub is to perform a second transaction with an agent based upon the first transaction at the first time; and wherein the first transaction at the second time is repeated after the second transaction, and further wherein the host controller is to send, during the first transaction at the first time, a first packet including agent identification information and a transfer indicator indicating that data needs to be transferred between the host controller and the hub, and to transfer, during the first transaction at the first time, a data packet between the host controller and the hub.

46. (Previously Presented) The system of claim 45, wherein the host controller is to process, during the first transaction at the first time, at least one of an acknowledgment, a

handshake indication, or a timeout indication.

47. (Previously Presented) The system of claim 45, wherein the data packet is transferred from the host controller to the hub.

48. (Previously Presented) A digital system comprising:

a host controller;

a device driver to operate the host controller to initiate and perform a first transaction at a first time between the host controller and a hub and to initiate and repeat the first transaction at a second time between the host controller and the hub;

wherein the hub is to perform a second transaction with an agent based upon the first transaction at the first time; and wherein the first transaction at the second time is repeated after the second transaction, and further wherein the host controller is to send to the hub, during the first transaction at the second time, a first packet including agent identification information and a transfer indicator indicating that data needs to be transferred between the hub and host controller, and to transfer, during the first transaction at the second time, a data packet between the host controller and the hub.

49. (Previously Presented) The system of claim 48, wherein the host controller is to process, during the first transaction at the second time, at least one of an acknowledgment, a handshake indication, or a timeout indication.

50. (Previously Presented) The system of claim 48, wherein the data packet is transferred from the hub to the host controller.

51. (Previously Presented) A digital system comprising:

a first hub controller to initiate and perform a first transaction at a first time with a host controller and to initiate and perform the first transaction at a second time with the host controller;

a second hub controller coupled to the first hub controller to perform a second transaction with an agent based upon the first transaction at the first time; and

wherein the first transaction at the second time is performed after the second transaction, and wherein the first hub controller is to receive from the host controller a first packet including agent identification information, a transfer indicator indicating that data needs to be transferred between the host controller and the first hub controller, during the first transaction at the first time, and to transfer a data packet between the first hub controller and the host controller, during the first transaction at the first time.

52. (Previously Presented) The system of claim 51, wherein the first hub controller is to send to the host controller at least one of an acknowledgment or a handshake indication during the first transaction at the first time.

53. (Previously Presented) The system of claim 51, wherein the data packet is transferred from the host controller to the first hub controller.

54. (Previously Presented) A digital system comprising:

a first hub controller to initiate and perform a first transaction at a first time with a host controller and to initiate and perform the first transaction at a second time with the host controller;

a second hub controller coupled to the first hub controller to perform a second transaction with an agent based upon the first transaction at the first time; and

wherein the first transaction at the second time is performed after the second transaction, and wherein the first hub controller is to receive from the host controller a first packet including agent identification information and a transfer indicator indicating that data needs to be transferred between the first hub controller and the host controller, during the first transaction at the second time, and to transfer a data packet between the first hub controller and the host controller during the first transaction at the second time.

55. (Previously Presented) The system of claim 54, wherein the first hub controller is to send to the host controller at least one of an acknowledgment or a handshake indication.

56. (Previously Presented) The system of claim 54, wherein the data packet is transferred from the host controller to the first hub controller.